NATIONAL HEALTH SERVICE CORPS EDUCATIONAL PROGRAM FOR CLINICAL AND COMMUNITY ISSUES IN PRIMARY CARE

ADOLESCENT HEALTH MODULE

Developed by

RICHARD E. KREIPE, M.D.
Associate Professor of Pediatrics
Chief, Division of Adolescent Medicine
University of Rochester Medical Center
Rochester, New York

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Revised by

RICHARD E. KREIPE, M.D.

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SUBTOPIC 1

OFFICE-BASED HEALTH PROMOTION FOR ADOLESCENTS

Developed in association with Viking A. Hedberg, M.D., Jonathan D. Klein, M.D., M.P.H., and Teri B. Aronowitz, M.S.N., F.N.P., Division of Adolescent Medicine, Department of Pediatrics, University of Rochester School of Medicine and Dentistry, Rochester, New York.

TIMELINE (60 minutes)

5 min	Introduction/Icebreaker
5 min	Review of objectives
10 min	Overview
35 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

Target group: Physicians in training and in practice; nurse practitioners and trainees; and physician assistants, and trainees.

This case focuses on a health promotion visit for an early adolescent. It addresses the mechanics of adolescent health care as well as the practical issues that the individual practitioner faces in providing comprehensive services. Upon completion of this session, participants will be able to:

1. Describe the major adolescent health problems and demonstrate understanding that adolescent health problems are primarily related to behavioral factors.

2. Give a rationale for incorporating health promotion into routine office practice.

3. Identify state-of-the-art guidelines for adolescent health supervision.

4. Discuss ways to make the health promotion visit "adolescent friendly."

5. Demonstrate the principles of effective office counseling for adolescents.

SECTION 2 OVERVIEW

Preventive health care emphasizes the prevention of disease among individuals, whereas public health focuses on protecting the health of larger groups. Health promotion overlaps the population and the individual approach. It emphasizes enhanced health, not merely the prevention or treatment of disease.

Adolescents report that their doctor is an important and respected source of information about their health, and four out of five adolescents report having made a preventive health care visit within the previous two years. Primary health care providers play an important role in adolescent health promotion and disease prevention by assessing developmental progress, screening for health risks, coordinating care, and helping adolescents and their families make healthy decisions.

Adolescents are generally healthy. Their leading health problems are related to behavior (Handout/Overhead 1). They include:

- Violence: intentional and unintentional (such as motor vehicle accidents)
- Trauma
- Suicide
- Eating disorders (including obesity)
- Conditions related to sexual activity, such as pregnancy and STDs
- Substance abuse
- Risk-taking behaviors predisposing them to various poor health outcomes

Over three-quarters of all mortality among 15– to 24–year–olds in 1992 resulted from three causes: trauma, suicide, or homicide. Although mortality from motor vehicle accidents has decreased, some problems, particularly suicide and violence, appear to be increasing in prevalence. Problems such as pregnancy, school failure, obesity, and HIV profoundly affect health status. Though most of these problems are potentially preventable, their psychosocial antecedents are complex.

Health promotion guidelines recommend annual health supervision visits until age 21 and emphasize addressing adolescent health issues comprehensively. They recommend a specific package of prevention services during adolescent health supervision visits, including anticipatory guidance, screening, brief counseling, and immunizations. In contrast to traditional medical care, in which diagnostic and therapeutic interventions are disease-oriented, health promotion stresses screening for co-morbidities and targeting social morbidities in the context of the individual adolescent (Handout/Overhead 2). Thus, it is impossible to prioritize by category of presenting symptom or by age of the patient what a provider should address.

Also, there is less emphasis on physical examination compared to traditional, problem-focused visits. A 13–year–old girl who has had four sexual partners in the past month may need different interventions than a 15–year–old boy who gets drunk three times a month. The identification of

health-risk behaviors must be followed by the development of an action plan to reduce or eliminate these behaviors. Health promotion is an ongoing process, not an event.

The health care professional should consider his or her personal experiences of preventive health care received as an adolescent. What were the sources of information? Was the information accurate and/or helpful? Did it cause a change in attitudes or behavior?

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

Jenny is a 14–year–old female in the office for a sports physical. The appointment was made by her mother, who is in the exam room with Jenny. Jenny has no specific complaints, although her mother tends to answer most of your questions. She has not seen a health care provider in three years. Her only request is for you to sign the form so that she can participate in soccer.

After reviewing confidentiality issues with Jenny and her mother, you invite the mother to step out of the room with you so that Jenny can have privacy in putting on a gown for her physical assessment. Outside of the room, you ask Jenny's mother if there are any concerns that she thinks need to be addressed during the visit. She feels things are going fairly well.

Speaking with Jenny privately, you learn that she has two girlfriends who are sexually active but she is not. She has drunk alcohol on three occasions, only at parties, but asks you not to tell her mother. She avoids smoking because she believes that it will reduce her endurance in sports. Jenny acknowledges a desire to lose weight to "get in shape" for soccer. Menstrual periods began at age 13 and now occur regularly every 28 days, without any accompanying symptoms.

Her physical examination reveals a 5'3" female weighing 118 pounds, with normal vital signs. She has mild facial acne. Her sexual maturity is Tanner Stage IV. Her physical examination is normal for a healthy, middle-adolescent female.

1. What preventive services and health-promotion elements should be considered in this office visit?

2. How should confidentiality be addressed?

3. If Jenny wanted contraceptives and didn't want her parents to know, should you see her back in the office without her parents' knowledge?

4. How can health promotion be incorporated efficiently into this visit?

SECTION 4 SUGGESTED ANSWERS

1. *What preventive services and health promotion elements should be considered in this office visit?*

   Although Jenny is in the office for a sports pre-participation evaluation, the visit is an opportunity for health promotion. The U.S. Centers for Disease Control and Prevention (CDC) has identified six adolescent health behaviors that are major sources of morbidity and mortality and are highly prevalent, modifiable, and measurable (Handout/Overhead 3).

   The practitioner can use this visit to address Jenny's potential and current behaviors before high-risk behaviors become incorporated into her lifestyle, or before problems occur such as a motor vehicle accident, an unwanted pregnancy or a sexually transmitted infection.

   Because two of her friends are sexually active, she is at increased risk of making her sexual debut within the next year or two. She may be at increased risk for trauma from a motor vehicle accident or unplanned sexual intercourse because of her history of drinking alcohol at parties. It is less likely that she will begin smoking. Although she is at a healthy weight, she desires to lose weight and may be receptive to counseling on nutrition and exercise. Never miss the opportunity to take advantage of such "teachable moments."

   The health care provider has screened the patient for common risk behaviors, which is a major step toward providing appropriate preventive care; however, there is no information about school performance, family life, psychosocial adjustment, or history of abuse. The patient should be screened for TB and hyperlipidemia, initially by history, and for a patient with risk factors, by testing. Common vaccines needed at this age include the dT (every 10 years), hepatitis B (indicated for all adolescents with no history of previous vaccination or disease), MMR (second vaccination, if not done at 4 to 6 years of age), and the varicella vaccine. Blood pressure should be routinely checked.

2. *How should confidentiality be addressed?*

   The ground rules about confidentiality should be addressed with the younger adolescent and parent/guardian together in the early part of the visit. A young person's right to confidentiality is best understood as a part of normal, healthy development and not as a power struggle between parents and teenager. It is more about respect for privacy than it is about keeping secrets.

   An open discussion of confidentiality with both Jenny and her mother could:

   - Support the development of autonomy
   - Model the shared decision making of effective parenting
   - Avoid potential dilemmas if sensitive material is elicited

- Facilitate the development of trusting therapeutic relationships

Therefore, the clinician should propose to both Jenny and her mother that Jenny will be seen alone for the majority of the visit. This approach serves two purposes: (1) fostering the adolescent's taking responsibility for her own health; and (2) permitting a candid discussion of concerns, risk behaviors, and possible interventions.

Limitations to confidentiality are based on the provider's judgment regarding what is in the *adolescent's* best interest. Confidentiality cannot be honored if the adolescent is judged to be seriously dangerous to herself or others. Each clinician may have different guidelines for overriding confidentiality, but it is imperative to clarify the rules prior to ascertaining potentially sensitive information from the adolescent. In Jenny's case, the request not to tell her mother about her drinking should have been addressed prior to asking about drinking.

3. *If Jenny wanted contraceptives and didn't want her parents to know, should you see her back in the office without her parents' knowledge?*

Ideally, families are involved in an adolescent's health care to support the adolescent and to help him or her make important health decisions. Health care providers can be most helpful to the adolescent by working within the context of the family. However, requiring parental involvement may discourage the adolescent from obtaining needed services.

Most states mandate that certain services can be provided to adolescent minors (usually defined as less than 18 years old) without parental consent. These services include those related to the diagnosis and treatment of sexually transmitted conditions, mental health services, and substance abuse interventions.

"Emancipated minors" are persons under the age of majority who meet one or more of the following criteria:

- They are living independently from their families
- They are married
- They are pregnant (or, in some states, they have delivered a baby)
- They serve in the armed forces

Emancipated minors can consent to their own health care.

Some states also recognize a so-called "mature minor" as capable of providing informed consent because he or she is capable of understanding the nature, extent, and consequences of medical treatment. Determination of mature minor status depends on the judgment of the provider and should be documented in the adolescent's record. A

summary of state minor consent statutes has been prepared by the National Center for Youth Law (see Suggested Reading).

In Jenny's case, confidential contraceptive services are an option but should be preceded by careful thought. Although currently available contraceptives are safe and effective, sexual activity is not free of risk. A reasonable plan would include discussion of:

- Her romantic relationships
- Options for expressing affection
- Abstinence as the most effective, least expensive, and lowest-risk method of birth control for adolescents

Jenny should be encouraged to discuss important health issues, including sexuality, with her parents. If Jenny indicated that she was planning to have sexual intercourse, condom use should be discussed and samples given; the majority of adolescents seeking contraception have already initiated sexual activity.

Jenny should receive additional education on the risks and prevention of STDs and pregnancy (with an emphasis on abstinence), contraceptive options should be discussed, and appropriate methods for reducing the risk for *both* STDs and pregnancy should be provided. Follow-up is important and can conveniently be scheduled to coincide with the hepatitis B immunization series.

4. *How can health promotion be incorporated efficiently into this visit?*

Eliciting the adolescent's and the family's concerns in an open-ended fashion at the beginning of the interview helps define the agenda for the encounter and builds rapport and trust. Systematic screening to identify asymptomatic yet important health problems should be routine and may be facilitated by the use of questionnaires (either paper forms or computer-based tools).

Adolescent health supervision should include a functional developmental assessment. Positive screening questions should be followed up with more in-depth questioning, eliciting details of the behavior, the reasons the young person participates in the behavior, and the readiness of the young person to change the behavior. Providing structure to the interview assures that appropriate screening occurs during each visit. Different mnemonics have been developed as reminders of the content of screening items (Handout/Overhead 4). Jenny needs to understand that your addressing these issues is part of your *routine* health screening with adolescent patients, and is neither judgmental nor accusatory. The focus of the interview is on her *health*.

SECTION 5 ADDITIONAL QUESTIONS AND ANSWERS

1. *Together, Jenny and you have decided that her drinking at parties is a problem because she has been driven home by a boy who had been drinking, and at the last party, where she was quite drunk, she ended up alone in a bedroom with an 18–year–old boy. She did not have intercourse but was very scared when he became aggressive. How do you best counsel her?*

   The guided decision-making model can be very useful in clinical practice. This model fosters the development of a partnership with the adolescent through careful listening, empathy, and showing understanding through summarizing. After a comprehensive history is elicited, feedback is given to the adolescent about strengths and specific concerns. Phrases such as, "I am concerned about..." express caring by the provider and help reduce resistance by the adolescent.

   In this case, Jenny is worried about her drinking at parties. Potential options for addressing her drinking can be developed by:

   - "Brainstorming" possible options
   - Evaluating the pros and cons of the options
   - Committing to a strategy
   - Providing health education to assist implementation of the strategy
   - Arranging follow-up and criteria to determine the success of the plan

   An honest commitment to this approach combined with a rational appraisal of family systems and a willingness to challenge self-defeating thoughts ("I can't" usually means "I won't" or "I don't want to") can be highly successful for many adolescents.

   Jenny is motivated to change her drinking habits because of the two negative outcomes she told you about. Together, you brainstorm how she can still have her social life and not feel like she has to drink alcohol. Jenny came up with the idea that she is "in training" for soccer so is therefore not drinking, allowing her to "save face" with her friends. You also talk about alternative ways to get home if the driver has been drinking.

   Jenny feels good about her decision not to drink. She and her mother agree that she can call home if she does not have a safe ride and one of her parents will provide one. They agree that this will be a "no questions asked" proposition, although any incidents will need to be addressed the following morning when everyone is calmer.

   Her mother is very thankful that this issue was brought up because she has been extremely worried but hasn't said anything. They agree to discuss the issue with her father. Jenny hugs her mother. You suggest that they schedule a time to talk at least weekly about issues including alcohol, safety, and sexuality.

Following Jenny's first hepatitis B shot, you suggest that Jenny can come back either with her mother or father, or alone, next month for the second shot, and you will check with her to see how things are going. You ask if Jenny has set a date to talk to her mom and dad, and Jenny says "How about Thursday after dinner," to which her mother agrees.

2. *You have enjoyed your interaction with Jenny and her mother, and would like to bring more teens into the practice. What approaches are available to make the center more attractive for teens without further stretching the health center budget?*

Adolescents need to feel welcome and perceive a benefit from the medical visit. The office staff and environment must be inviting. Office staff should be knowledgeable, caring, direct, and honest as well as good listeners. As noted by Peabody more than 60 years ago, the "secret of patient care is in caring for the patient." This is especially true for adolescents.

Displaying adolescent-oriented educational materials, possibly through the use of a computer or video, can send the message that adolescents are welcome. The decor in the waiting room and in the examination rooms should either be age-neutral or focused on adolescents in some areas. A separate area dedicated to adolescent health issues in the waiting room can be helpful. Information about the purpose of adolescent health supervision and confidentiality policies can be posted on an office wall or in handouts. Dedicating specific hours for adolescents and using tailored adolescent questionnaires may be helpful. Also, first impressions are important. The receptionist must enjoy working with teens.

To comprehensively address adolescent health issues, health supervision visits generally require 20 to 30 minutes. The value of two-minute "sports physicals" is limited to the identification of orthopedic conditions or medical problems that may affect, or be made worse by, sports participation. Flexibility in scheduling is important, and reasonable compromises can be achieved that accommodate the adolescent patient, the busy health care provider, and the other patients in the practice. Office hours need to match times when adolescents are available—late afternoons, early evenings, or Saturday mornings.

To meet adolescents' needs, you must consider potential barriers, including transportation, language, culture, and finances. Financial barriers can be significant, particularly for confidential visits (Handout/Overhead 5). You may find it helpful to work out an agreement with parents when their child is early in adolescence so that their adolescent may see you at times without the parents' knowing the nature of the visit. This way, if they receive a bill, they will be prepared. For some confidential visits, there must be a mechanism in which bills are not generated at all. Sliding fee scales, free care, and deferred payment schemes can help adolescents access care, but these approaches require commitment of resources.

SECTION 6 SUGGESTED READING

1. Beach RK. Priority Health Behaviors in Adolescents: Health Promotion in the Clinical Setting. *Adolescent Health Update: A Clinical Guide for Pediatricians.*, 1991;3(2). Elk Grove Village, IL, Section on Adolescent Health, American Academy of Pediatrics.
   Brief, practical discussion of incorporating health promotion into clinical practice, with an eye toward prioritizing messages based on years of potential life lost.

2. Elster AB, Kuznets NJ. *AMA Guidelines for Adolescent Preventive Services (GAPS): Recommendations and Rationale.* Baltimore, MD: Williams and Wilkins, 1994.
   Enumerates the 24 recommendations included in GAPS, provides the process leading to the selection of the recommendations, and reviews the scientific evidence supporting the recommendations.

3. Green M. *Bright Futures: Guidelines for Health Supervision of Infants, Children and Adolescents.* Arlington, VA: National Education Center for Maternal and Child Health, 1994.
   Comprehensive handbook presenting the recommended content and structure for health supervision from birth to age 21.

4. Klar H, Coleman WL. Brief solution-focused strategies for behavioral pediatrics. *Pediatric Clinics of North America* 42 (1):131–141, 1995.
   Superb guide to solution-focused counseling, using goal contracting, focusing on exceptions when things are going well, hypothetical questions, scaling of problems, compliments, and intersession homework.

5. Millstein SG, Nightingale EO, Petersen AC, Mortimer AM, Hamburg DA. Promoting the healthy development of adolescents. *JAMA* 269:1413–1415, 1993.
   Presents issues surrounding provision of preventive services in office practices.

6. National Center for Youth Law. *State Minor Consent Statutes: A Summary*. Cincinnati, OH: Center for Continuing Education in Adolescent Health, 1995.
   Comprehensive review of statutes in each state setting forth circumstances under which minors may consent to their own health care. Refers to case law where applicable.

SECTION 7 RESOURCES

1. **National Clearinghouse for Primary Care Information.** Provides information to support the planning, development, and delivery of ambulatory care to urban and rural areas where there are shortages of medical personnel and services.

   Contact: National Clearinghouse for Primary Care Information, 8201 Greensboro Drive, Suite 600, McLean, VA 22102, 703-821-8955, ext. 248.

2. **National Maternal and Child Health Clearinghouse.** Provides information related to activities of the Bureau of Maternal and Child Health.

   Contact: National Maternal and Child Health Clearinghouse, 703-821-8955, ext. 254 or 265.

3. **ETR Associates.** Health education materials ranging from pamphlets and booklets to videotapes. *Big Changes, Big Choices* is a video series with 12 30–minute videos on common issues of adolescence (such as enhancing self-esteem, getting along with parents, speaking of sex, saying no to alcohol and other drugs, and so forth) $699.50 for set or $69.95 each. *The Power of Choice* video series is also composed of 12 tapes devoted to helping adolescents make decisions that affect them.

   Contact: ETR Associates, PO Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

SECTION 8 HANDOUTS/OVERHEADS (ATTACHED)

Mortality per 100,000 Population, Ages 15–24

Rank	Cause of death	Rate per 100,000	% Total Deaths in Age Group
1.	Accidents and adverse effects	37.8	39.6
	Motor vehicle	28.5	
	All other accidents	9.3	
2.	Homicide	22.2	23.2
3.	Suicide	13.0	13.6
4.	Malignant Neoplasms	5.0	5.2
5.	Diseases of the heart	2.7	2.8
6.	HIV	1.6	1.7
	Total	**95.6**	

(Kochanek KD, Hudson BL. Advance report of final mortality statistics, 1992. Monthly vital statistics report 1994;43(6) suppl. Hyattsville, MD, National Center for Health Statistics.)

HANDOUT/OVERHEAD 1

Health Issues Addressed in GAPS

1. Parenting and family adjustment
2. Psychosocial adjustment
3. Injuries
4. Dietary habits and nutritional disorders
5. Physical fitness
6. Sexual behaviors and related outcomes
7. Hypertension
8. Hyperlipidemia
9. Use of tobacco
10. Use of alcohol and other substances
11. Depression and suicide
12. Abuse
13. Learning and school problems
14. Infectious diseases (including TB screening and vaccines)

Elster, A.B. and Kuznets, N.J. *AMA Guidelines for Adolescent Preventive Services (GAPS): Recommendations and Rationale*, Baltimore, MD: Williams and Wilkins, 1994.

HANDOUT/OVERHEAD 2

Priority Health Behaviors of Adolescents

1. Use seat belts
2. Do not drink (or use drugs) and drive
3. If you have sex, use condoms
4. Do not smoke
5. Eat a low-fat diet
6. Get regular aerobic exercise

From: Beach RK. Priority Health Behaviors in Adolescents: Health Promotion in the Clinical Setting. *Adolescent Health Update: A Clinical Guide for Pediatricians.* Elk Grove Village, IL, Section on Adolescent Health, American Academy of Pediatrics, February 1991; Volume 3, Number 2).

HANDOUT/OVERHEAD 3

Interview Structures for Adolescents

Getting into Kids' HEADSS
or
Putting Adolescents through the PACES

Home

Education/vocation

Activities/ambition

Drugs/DWI/delinquency

Sexuality/sexual abuse

Suicide/safety

Peers/parents

Accidents/alcohol and other drugs

Cigarettes/other forms of tobacco

Exercise/eating/emotions

School/sexuality/sleep

HANDOUT/OVERHEAD 4

Treating Adolescent Minors

- Confidentiality
    - Best discussed in advance
    - Privacy and respect for persons, not keeping secrets
    - Based on gradually increasing responsibility
- Rights of minors to seek health care based on:
    - Legal status (varies by state and condition)
        - Age
        - Emancipation
        - "Mature minor"
    - Health condition
        - Life-threatening problem
        - Sexual health problem
        - Drug and alcohol problem
        - Mental health problem
    - Must be aware of state regulations and local customs
- The secret of patient care is caring for the patient

HANDOUT/OVERHEAD 5

SUBTOPIC 2

SMOKING CESSATION STRATEGIES FOR ADOLESCENTS

Developed in association with Jonathan D. Klein, M.D., M.P.H., Division of Adolescent Medicine, Department of Pediatrics, University of Rochester School of Medicine and Dentistry, Rochester, New York.

TIMELINE (60 minutes)

5 min	Introduction
5 min	Review of learning objectives
10 min	Overview
35 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

Target group: Physicians in training and in practice; nurse practitioners and trainees; and physician assistants, and trainees.

This module reviews smoking and smokeless tobacco use, and discusses effective strategies to prevent tobacco use by children and adolescents. Upon completion of this session, participants will be able to:

1. Use specific means to ask adolescents about their smoking habits.

2. Describe strategies to advise adolescents about reasons to stop smoking related to immediate, rather than long-term, consequences.

3. Explain how to assist a motivated adolescent to stop smoking.

4. Arrange for follow-up of adolescents motivated to stop using tobacco.

SECTION 2 OVERVIEW

Tobacco is the only legal substance that causes death and disease when used as intended. Smoking, which kills 434,000 Americans each year, is the largest preventable cause of mortality and morbidity in the United States. Nearly 3,000 young people become regular smokers every day. As many as one in three adolescents currently smoke, and one in three adolescents are tobacco users by age 18. Up to 20% of male (and 2% of female) adolescents use smokeless tobacco.

The U.S. Surgeon General identified in 1964 a relationship between smoking cigarettes and disease. As the health effects of tobacco have become more widely known, the social acceptability of tobacco has declined. Almost half of all adults who have ever smoked are no longer smokers.

Recent attempts to call attention to the problems of tobacco addiction among adolescents include:

- The Surgeon General's 1994 report, "Preventing Tobacco Use Among Young People"
- The attempt by the Food and Drug Administration (FDA) to classify nicotine as an addictive substance to be placed under FDA regulatory control
- The U.S. President targeting limitation of tobacco sales to minors as a central strategy in limiting the health problems associated with tobacco

Major conclusions of the Surgeon General's 1994 report include the following facts (Handout/Overhead 1):

- Nearly all first use of tobacco occurs before high school graduation; if adolescents can be kept tobacco-free, most will never start using tobacco as adults.

- Most adolescent regular smokers are addicted to nicotine and report that they want to quit but are unable to do so; they experience relapse rates and withdrawal symptoms similar to those reported by adults.

- Tobacco is often the first drug used by young people who use alcohol, marijuana, and other drugs, and is associated with numerous other high-risk health behaviors.

- Adolescents with lower levels of school achievement, with fewer skills to resist pervasive influences to use tobacco, with friends who use tobacco, and with lower self-images are more likely than their peers to use tobacco.

- Cigarette advertising appears to increase young people's risk of smoking by affecting their perceptions of the persuasiveness, image, and function of smoking.

- Community-wide efforts that include tobacco tax increases, youth-oriented mass media campaigns, and school-based tobacco use prevention programs are successful in reducing adolescents' initiating, as well as continuing to use, tobacco.

The National Cancer Institute (NCI) has developed the "Physician's Guide to Smoking Cessation" to help patients prevent tobacco use. A systematic approach to patient care that incorporates reminders in the medical record will result in more complete and frequent intervention by the clinician, and therefore more likely will be effective in helping adolescents refrain from smoking. The NCI counseling guide prompts specific counseling strategies based on the "4A"s mnemonic: Ask, Advise, Assist, and Arrange. For adolescents, a fifth "A" is added: Anticipate, reflecting the anticipatory guidance needed by younger patients (Handout/Overhead 2).

Smoking cessation messages are most effective when they are presented through multiple routes and repeated over time by various sources in various settings. Clinicians should address all of the factors contributing to adolescents' perceptions of cigarettes and smoking, including parents, siblings, peers, advertising, and the media.

Although pre-teens often condemn smoking, the development of adolescent autonomy may include testing of behavioral limits and the perception of personal invulnerability. These tests increase the risk of smoking. However, teaching resistance skills can help youth avoid tobacco. Additionally, by acknowledging the perceived social benefits of smoking while providing unambiguous messages about the adverse health effects, clinicians can plant seeds for future interventions and may help increase future motivation to quit for those patients who do initiate smoking.

In the first two years after starting to smoke, social influences play a significant role in the decision to stop smoking. However, recent evidence also suggests that many adolescents are addicted to nicotine, making it difficult for adolescents to quit. Such adolescents benefit from strategies to help them stop.

Consider your own experiences as an adolescent:

- Parents, friends, and siblings smoking are among the strongest predictors of whether adolescents become smokers. The most frequently reported source of teens' first and second cigarettes are older siblings and friends, respectively. Because of early adolescents' concern with being "normal" and accepted within their social group, peer groups that define themselves as non-traditional will often adopt antisocial habits, such as smoking, as an expression of group identity. For a young person seeking group identification, the desire to smoke in order to be like peers may easily outweigh any earlier intention to avoid tobacco. What were the strongest influences on *your* smoking or not smoking?

- Many youth first are exposed to tobacco as smokeless tobacco (chewing tobacco or snuff). Did you or your friends use tobacco in other forms? Why or why not?

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

Brad is a 15–year–old male who is brought to your office for an asthma attack. He was diagnosed with eczema as an infant and developed recurrent bronchospasm around age 10. He has numerous seasonal allergies and was recommended to have desensitization shots by an allergist but refused this treatment. He uses an inhaler whenever he feels "tight" but does not take any bronchodilators routinely.

After receiving one treatment with nebulized bronchodilators in your office on this visit, he feels much improved. You mention that you want to observe him to make certain that he does not rebound with increased bronchospasm as the medication wears off. During this observation period, his mother goes to the parking lot to smoke a cigarette.

You notice that Brad has a duffel bag bearing the logo of a cigarette manufacturer and that his clothes smell of cigarette smoke. When asked directly, he admits to smoking but is unable to link it to any illness or decreased function. He notes that "my friends smoke a lot more than I do." Before you have a chance to respond, he adds, "Besides, my father says, 'You gotta go some way. You might as well have fun.' I've heard it all before."

1. How can you ask an adolescent about smoking in a nonjudgmental way?

2. When counseling about the advisability of stopping smoking, how many reasons that do *not* relate to long-term complications (e.g., lung cancer or heart disease) can you generate?

3. What nonpharmacologic methods can be used to assist an adolescent who desires to stop smoking?

4. What kind of follow-up would you arrange for Brad?

Note: As you develop answers to these questions, keep the following points in mind:

- Smoking may exacerbate bronchospasm and complicate asthma treatment.

- Brad may not be aware of smoking as a personal risk, or he may be aware of his risk but may not yet be planning to change his behavior. Understanding his position regarding readiness to change helps you target your intervention and makes the process more collaborative than coercive.

- You must balance the need to inform Brad of the hazards of smoking with the need to engage him as a willing partner in any treatment plan. The desirability of ceasing to smoke should be linked to concrete, immediate benefits.

SECTION 4 SUGGESTED ANSWERS

1. *How can you ask an adolescent about smoking in a nonjudgmental way?*

   Because most smokers start smoking during adolescence, all health care providers must anticipate smoking among adolescent patients. While families are important influences on young people, all adolescents should have access to a confidential relationship with their primary care providers. Otherwise, there may not be an appropriate setting for discussing smoking behaviors or peer influences. Parents should also be aware of the importance of stating clear expectations and the effect of their own behavior in role-modeling for teens.

   Asking questions about smoking should be a routine part of health care for *all* adolescents. Such questions are most likely to be answered honestly if they are posed directly and concretely, in the context of standard health care and are related to concern about the health of the adolescent. This approach should minimize eliciting expected or socially acceptable answers, or those based in fear of being reported to parents.

   You could introduce the concept in routine care using the PACES mnemonic discussed in Subtopic 1. Alternatively, you could state, "Some of my patients begin smoking when they are your age," then ask, "How many of your friends have begun to smoke or chew tobacco?" It is important to use the correct terminology for the geographic location of your office because this will indicate an awareness and interest in the topic. For example, you may use the words "snuff," "dip" or other terms for smokeless tobacco.

   If there are friends who use tobacco, the next question could be, "Do you smoke (chew) with them, or by yourself or not at all?" This line of questioning could lead to an exploration of the type, duration, frequency, intensity, and settings of use. It could also lead to discussion of smoking other substances (such as marijuana) and to discussions about substance use in other forms, situations, or settings.

   If there are no friends who use tobacco, it is still worthwhile to ask about use by the patient. When tobacco use is denied, ask what the patient would do if offered a cigarette, as well as how he or she has been able to resist the pressure to smoke that some adolescents experience. This question gives you an opportunity to provide positive reinforcement for health promotion behaviors and lets the adolescent know that if smoking does become an issue in the future, help is available.

2. *When counseling about the advisability of stopping smoking, how many reasons that do* not *relate to long-term complications (such as lung cancer or heart disease) can you generate?*

   Advise adolescents to stop smoking using short-term reasons (Handout/Overhead 3):

- Bad breath and stained teeth
- Sore throat and cough
- Upper respiratory infections (worsening of asthma, etc.)
- Shortness of breath, or "wind" for runners
- Decreased fitness or exercise ability (especially for athletes)
- Cost
- Being controlled by (addicted to) cigarettes

You can also state the benefits of not using tobacco by inverting these points. For example, for cost you could say, "Let's figure out how much money you would save in a year by not smoking... What do you think you'd like to buy instead with that money?"

Dwelling on long-term complications or using scare tactics may have less influence on adolescents, who tend to have difficulty considering serious consequences in the distant future. Their cognitive style generally makes them more amenable to concrete and immediate effects that have social implications.

3. *What non-pharmacologic methods can be used to assist an adolescent who desires to stop smoking?*

Assist the patient who is interested in smoking cessation by (Handout/Overhead 4):

- Providing positive reinforcement for this important decision
- Setting a quit date and noting it in the patient's record
- Providing self-help materials
- Developing an individualized, written stop-smoking agreement with adolescents
- Including parents and others in supportive roles (especially if they smoke)
- Encouraging avoidance of settings in which smoking is likely
- Encouraging avoidance of friends who smoke or asking for friends' help in cessation

In addition to these measures, it is important to let the adolescent know that smoking cessation may be more difficult than he or she might anticipate because the physiologic addiction to nicotine and the social triggers to smoking may be much stronger than expected. Also, smoking cessation is probably better considered to be a process than an event. That is, people who eventually stop smoking often require numerous attempts before being successful.

Habits such as smoking are automatic, often performed without active thinking and elicited by subtle triggers. Therefore, they are not changed easily or quickly. Unfortunately, repeated attempts to stop smoking are often interpreted as evidence that the patient will fail all future attempts.

Instead of focusing on the return to smoking, you can emphasize that the patient was able to avoid smoking for a period of time. Set a new goal to extend the period of abstinence further on the next attempt. By learning what caused the most recent attempt to fail, the adolescent may be able to avoid situations that make relapse of smoking more likely.

Nonsmoking adolescents or those who are smoking experimentally may need assistance as well. Help enhance their problem-solving skills to counter potential peer-pressure.

For those not yet motivated to stop smoking, emphasize knowledge and attitude change.

4. *What kind of follow-up would you arrange for Brad?*

A follow-up appointment within the next week would be appropriate to monitor his recovery from breathing difficulties and to discuss smoking again. His parents could be included in this session. You need to encourage parents who smoke to quit, and your advice relating to Brad's health reinforces what they may have heard about tobacco's threats to their own health. They may resist smoking cessation messages, but if smoking is linked to Brad's asthma, they may be more open to considering change. Continue to advise Brad about the benefits of smoking cessation but avoid badgering him, even if he does not attempt to stop smoking.

If Brad had set a stop date, it would be appropriate to see him soon after that time to reinforce the importance of his stopping. As with adults, adolescents who agree to a quit date should have a follow-up visit within a week or two after that date, and again in six to eight weeks, to discuss progress with quitting or to encourage another attempt.

It is important to work with patients in identifying high-risk relapse situations and problem-solving to avoid them. Because smokers try quitting an average of seven times before succeeding, the possibility of relapse should be acknowledged up front. What happened in relapse and how relapse could be prevented in subsequent quitting attempts should be discussed during the follow-up visits.

SECTION 5 ADDITIONAL QUESTIONS AND ANSWERS

1. *How can the clinical setting best promote and reinforce smoking cessation efforts?*

   In addition to the messages you deliver, your office or clinic site can be organized to promote health and reinforce smoking cessation efforts. For example, your office should be smoke-free. Affirmative health messages are important for the waiting room and may also be useful in other patient communications (e.g., letters, or other reminders). A chart sticker system that identifies smoking patients and a problem list or chart flow sheet that reminds both providers and nursing staff about smoking and other preventive services help systematize preventive counseling practices.

   Involving nurses and other office staff in smoking cessation makes counseling more likely, reduces the burden on the primary care physician, and significantly increases cessation rates compared to physician advice alone. NCI recommends identifying a smoking cessation coordinator for a clinical setting; even better, a health promotion coordinator who oversees all preventive services. This person assumes responsibility for establishing systems for reminding providers to deliver smoking cessation and prevention messages, for making sure appropriate handouts are in place, and for providing ongoing support to other staff within the practice.

   NCI's guide provides specific recommendations for the smoking coordinator, as do the AMA "Guidelines for Adolescent Preventive Services Implementation" manual and the Office of Disease Prevention and Health Promotion's "Put Prevention into Practice" manual.

2. *What are the advantages and disadvantages of nicotine patches or gum?*

   Although complex psychological and sensory factors contribute to the initiation of smoking, nicotine is a powerfully addictive substance. The maintenance of smoking is due in great part to the addictive nature of nicotine, as well as to the continued effects of the social influences that lead to initiation of smoking.

   Unless physiologic addiction is present, nicotine replacement should not be used for adolescent smokers. However, recent data shows that younger smokers who smoke or use smokeless tobacco daily were as likely as older smokers to report signs and symptoms of nicotine withdrawal, and thus might benefit from use of nicotine gum or patches. Clonidine also has recently been found effective for managing withdrawal symptoms with relief of anxiety, tension, irritability and the craving for cigarettes.

SECTION 6 SUGGESTED READING

1. Campbell EE, Villagra VG, Rogers CS, et al. Teaching and promoting smoking cessation counseling in primary care residencies: Description of a method. *Journal of Teaching and Learning in Medicine*. 1992; 3: 20–27.
   Excellent discussion of how to teach smoking cessation to physicians.

2. Cohen SJ, Christen AG, Katz BP, et al. Counseling medical and dental patients about cigarette smoking: The impact of nicotine gum and chart reminders. *Am J Public Health*. 1987;77:313–316.
   Helpful tips about how to increase adherence to smoking cessation.

3. Epps RP, Manley MW. *A Physician's Guide to Preventing Tobacco Use During Childhood and Adolescence*. National Cancer Institute, Rockville, MD, October 1990.
   Essential guide that is the model for most smoking cessation programs.

4. Hollis JF, Lichtenstein E, Vogt TM, Stevenes VS, Biglan A. Nurse assisted counseling for smokers in primary care. *Ann Int Med*, 1993: 118: 521–525.
   Describes role of nurses in smoking cessation.

5. Institute of Medicine. *Growing Up Tobacco Free: Preventing Nicotine Addiction in Children and Youths*. Washington, DC.: National Academy Press, 1994.
   Leading agency discusses ways to prevent tobacco use by young people.

6. Klein J, Portilla M, Goldstein A, Leininger L. Training pediatric residents to prevent tobacco use. *Pediatr*; 1995; 96: 326–330.
   Results of a training program for pediatric residents.

7. Kotke, T et al (1988). Attributes of successful smoking cessation programs. *JAMA*; 1988; 259: 2883–2889.
   Discussion of the active ingredients in effective smoking cessation programs.

8. Reasons for tobacco use and symptoms of nicotine withdrawal among adolescent and young adult tobacco users—US, 1993. *MMWR*; 43: 745–749. 1994.
   Survey of adolescents.

9. *The Health Consequences of Smoking: Nicotine Addiction*. Rockville, MD. USDHHS, PHS, CDC, 1988; DHHS 88-8406.
   Surgeon General report outlining the serious health problems of tobacco use.

10. US Dept. of Health and Human Services. *Preventing Tobacco Use Among Young People*. 1994; DHHS. Washington, DC. [see also Executive Summary in *MMWR* 43:1–10:1994.]
    Surgeon General report discussing strategies to prevent young people from using tobacco products.

SECTION 7 RESOURCES

1. **National Cancer Institute**. Information specialists answer questions about cancer from the public and offers a variety of free patient and professional materials. "Quit for Life" and "How to Help your Patients Stop Smoking" include patient handouts and office materials to implement a smoking cessation program in your practice. Telephone services and some publications are available in Spanish.

   NCI Curriculum Trainers also offer local training for groups of providers, through NCI or through primary care organizations. The American Academy of Pediatrics Tobacco Alcohol and Drug (TAD) Free Program has a coordinator's network, periodic newsletters, and briefing materials (800-433-9016).

   Contact: National Cancer Institute, Office of Cancer Communications, Building 31, Room 10A24, Rockville Pike, Bethesda, MD 20892, 800-4-CANCER.

2. **U.S. Centers for Disease Control and Prevention**. Offers bibliographic and reference support. Publishes the annual Bibliography on Smoking and Health. Runs a clearinghouse of anti-smoking video and radio advertisements in English, Spanish, and some Asian languages (404-488-5701). The "Putting Prevention into Practice" program includes implementation materials and a provider's manual for preventive services delivery. The "Put Prevention into Practice Education and Action Kit" can be ordered from the Government Printing Office, Washington, DC, 202-783-3238.

   Contact: Centers for Disease Control and Prevention, Office on Smoking and Health, 1600 Clifton Road Room MS-K12, Atlanta, GA 30333, 800-CDC-1311.

3. **National Heart, Lung and Blood Institute**. Programs and packages for physicians and other health care providers for use with smoking patients.

   Contact: National Heart, Lung and Blood Institute, Smoking Education Program Information Center, PO Box 30105, Bethesda, MD 20824, 301-951-3260.

4. **American Medical Association**. The AMA Department of Adolescent Health has developed the Guidelines for Adolescent Preventive Services (GAPS), a comprehensive adolescent preventive service program. Physician training is being developed in cooperation with the American Academy of Pediatrics, the American Academy of Family Physicians, the Society for Adolescent Medicine, and other groups. Call for information.

Additionally, the AMA's Department of Preventive Medicine conducts a variety of anti-tobacco initiatives and administers the Smokeless States grant program for the Robert Wood Johnson Foundation. Available materials include: the "Physician Guidelines on Smoking Cessation;" guidelines for health facilities, schools, and public advocacy; organizational contact information; model bills, and testimony. Call 312-464-5957 for more information about the AMA's anti-tobacco initiatives.

Contact: American Medical Association, Department of Adolescent Health, 515 North State Street, Chicago, IL 60610, 312-464-5570.

5. **American Cancer Society**. Local chapters in most cities or states. Provides free and low-cost pamphlets, posters, self-help materials, speakers, training, and support.

   Contact: American Cancer Society, Clifton Rd, NE, Atlanta, GA 30329, 800-227-2345 or 404-320-3333.

6. **American Heart Association**. Chapters in most cities or states, with a range of publications and support programs.

   Contact: American Heart Association, Greenville Ave., Dallas, TX 75231, 214-750-5300.

7. **American Lung Association.** Chapters in most cities or states provide a range of publications, including free literature to help companies develop smoking policies, self-help materials, and group cessation clinics and support programs.

   Contact: American Lung Association, Broadway, New York, NY 10019, 212-315-8700.

8. **Doctors Ought to Care (DOC).** This private anti-smoking advocacy group provides patient materials for anti-smoking advocacy in the office and the community.

   Contact: Doctors Ought to Care, PO Box 50267, Kirby Drive, Suite 440, Houston, TX 77005, 713-528-1487.

9. **Stop Teenage Addiction to Tobacco (STAT).** A private advocacy group focused on supporting community-oriented efforts to prevent adolescent smoking and limit youth access to tobacco. Information about tobacco sale restriction enforcement is available.

   Contact: Stop Teenage Addiction to Tobacco, PO Box 60658, Longmeadow, MA 01116, 413-567-2070.

10. **Wisconsin Clearinghouse**. Educational materials including "Smokeless Tobacco: A Spittin' Image," a 15-minute video for ages 9 to 16. $99.

    Contact: Wisconsin Clearinghouse (University of Wisconsin-Madison), Dept. 6A, PO Box 1468, Madison, WI 53701-1468, 1-800-322-1468, online: <http://www.uhs.wisc.edu/wch>.

SECTION 8 HANDOUTS/OVERHEADS (ATTACHED)

Surgeon General's 1994 Report on Smoking and Health

1. Nearly all first use of tobacco occurs before high school graduation; if adolescents remain tobacco-free, most will never start using as adults.

2. Most adolescents who are regular smokers are addicted and want to quit but are unable to do so; they experience relapse and withdrawal symptoms similar to those experienced by adults.

3. Tobacco is often the first drug used by youth who use other drugs, and is associated with high-risk behaviors.

4. Adolescents with poorer school achievement, fewer resistance skills, friends who smoke and poorer self-image are more likely to use tobacco.

5. Cigarette advertising increases young peoples' risk of smoking by affecting their perceptions of the image and function of smoking.

6. Community-wide efforts (tobacco taxes, youth-oriented mass media campaigns and school-based tobacco use prevention programs) are successful in reducing adolescents initiating and using tobacco.

HANDOUT/OVERHEAD 1

The Five "A"s of Smoking Cessation

1. Anticipate risk of smoking

2. Ask about smoking

3. Advise smokers to stop

4. Assist smokers who are interested to stop

5. Arrange follow-up

HANDOUT/OVERHEAD 2

Short-Term Reasons to Stop Smoking

- Bad breath
- Stained teeth
- Sore throat
- Cough
- Upper respiratory infections (worsening of asthma, etc.)
- Shortness of breath
- Reduced fitness and exercise ability (especially athletes)
- Cost
- Being controlled by (addicted to) cigarettes

HANDOUT/OVERHEAD 3

Helping Teens Who Want to Stop Smoking

- Provide positive reinforcement
- Set a quit date (mutually) and note it in the chart
- Provide self-help materials
- Develop an individualized agreement
- Include parents and others in support
- Avoid settings in which smoking is likely
- Avoid friends who smoke and ask for help in cessation
- Consider nicotine replacement

HANDOUT/OVERHEAD 4

SUBTOPIC 3

SEXUALLY TRANSMITTED DISEASES: CARING FOR ADOLESCENTS

Developed in association with Giuseppina DiMeglio, M.D., Division of Adolescent Medicine, Department of Pediatrics, University of Rochester School of Medicine and Dentistry, Rochester, New York. Laureen Ekeze, MSW, SA Ryan.

TIMELINE (60 minutes)

5 min	Introduction/Icebreaker
5 min	Review of Objectives
10 min	Overview
35 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

Target group: Nurse practitioners, physician assistants, medical students (upper level), residents, and practicing clinicians.

Upon completion of this session, participants will be able to:

1. Include sexuality-related issues in the assessment of an adolescent and use gender-neutral terms in discussing adolescent sexual behavior.

2. Recognize painful urination in adolescents as a symptom suggestive of an STD.

3. Differentiate between urethritis (frequently an STD) and urinary tract infection (less likely to be an STD).

SECTION 2 OVERVIEW

Sexual activity is one of the highest-risk behaviors among adolescents and one of the most difficult topics for many health care providers to discuss openly with adolescents.

Sexual maturation is normally accompanied by an emotional transition from dependence to self-sufficiency. Maturational steps are also evident in the development of adolescent sexual identity and sexual behavior. Unfortunately, lack of synchrony can lead to risky behaviors when physical maturity is accompanied by psychological immaturity. The practitioner must be aware of these issues and use each encounter as an opportunity for prevention and education.

The age of sexual debut is declining steadily. In 1968, 55% of males and 35% of females had initiated intercourse by age 18. In 1988, these numbers had risen to 73% and 56%, respectively. The earlier onset of sexual activity is associated with an increased risk of acquiring an STD. Gonorrhea is most prevalent in the 15– to 19–year–old group, and syphilis rates are increasing in this age. Many HIV infections detected in young adults were acquired during adolescence. Chlamydia infection is prevalent (8%-25%), as is human papilloma virus infection (3%-33%).

Early sexual debut is associated with more sexual partners for both males and females. Most teens are serially monogamous but tend to be with a partner for short periods of time. The brevity of relationships is a normal feature of adolescent development.

Studies have shown that the younger the adolescent, the longer the time lag between the initiation of sexual intercourse and first use of contraceptives.

Experimentation, a hallmark of adolescence, may lead some teens to use drugs, such as alcohol, resulting in an altered mental state that contributes to unplanned and unprotected sexual encounters.

Every contact with an adolescent is an opportunity for preventive health maintenance. Because sexual development is an integral part of adolescence, it is important to include sexual health in the routine assessments. Adolescents who are not sexually active should receive positive reinforcement for abstinence but should also have their future plans for sexual activity addressed.

For teens who are sexually active, inquire about symptoms of STDs at a routine visit. Even in the asymptomatic sexually active adolescent, you should either do a genital exam (with appropriate cultures and Pap smear in females) or schedule one soon thereafter.

Because compliance with appointments is sometimes a problem for adolescents, do not miss an opportunity to complete your evaluation for a patient who is in your office. Also, be sure to inquire about contraception in the heterosexual patient, and strongly encourage its use.

Throughout the discussion of these sensitive topics, remain open, nonjudgmental, and authoritative, but not authoritarian.

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

Damian is a 17–year–old adolescent who presents with progressively worsening burning on urination over the past three days. He denies any frequency or urgency. He has no pain in his testicles, as well as no back or abdominal pain, and denies malaise and fever. He has not noted a penile discharge and has no penile sores.

Damian currently has a girlfriend, with whom he is sexually active. They used condoms in the past, but stopped using them because "they always break." Damian has never had an STD before.

1. What is the differential diagnosis of painful urination in adolescent males? How is this different in females?

2. What in the history may help to distinguish urethritis from urinary tract infection (UTI)?

3. How do you elicit a sexual history from Damian?

SECTION 4 SUGGESTED ANSWERS

1. *What is the differential diagnosis of painful urination in adolescent males? How is this different in females?*

   The most common cause of painful urination in the adolescent male is urethritis (Handout/Overhead 1). Causative agents include chlamydia and gonorrhea; less commonly, *Herpes simplex, Human papillomavirus, Mycoplasma hominis* and *Ureaplasma urealyticum* can cause symptoms. *Trichomonas vaginalis* is a protozoan that can cause urethritis. In males engaging in anal intercourse, the bacterial flora of the colon—*Escherichia coli, Bacteroides fragilis*—can also be involved.

   Cystitis and pyelonephritis are less common causes of painful urination in males. If either is diagnosed in a male adolescent, a work-up for genitourinary abnormalities is imperative. Noninfectious causes of dysuria include trauma to the urethra caused by a calculus, or the insertion of a foreign body into the urethra. Urethral inflammation due to breakdown of the mucosal lining occurs in Reiter syndrome and in Stevens-Johnson syndrome.

   In females, cystitis is more common, owing to the relatively short urethra. Infection with chlamydia or gonorrhea can present with dysuria, a vaginal discharge, or with abdominal pain and dyspareunia.

2. *What in the history may help to distinguish urethritis from urinary tract infection (UTI)?*

   Patients experiencing pain throughout voiding are more likely to have urethritis, while those who experience it toward the end of voiding (with a prickly sensation in the glans penis) are more likely to have cystitis. Pain at the end of voiding can also be associated with a bladder calculus, prostatitis, or seminal vesiculitis.

   Low back pain and/or abdominal pain often accompany cystitis, while midback pain and fever should raise clinical suspicion of pyelonephritis. Pain in the testes, especially associated with urethritis, should alert the clinician to the possibility of epididymitis, which may also be caused by either gonorrhea or chlamydia.

   Frequency, urgency, and post-voiding retention are hallmarks of UTI; upper tract disease (pyelonephritis) is associated with systemic symptoms including costo-vertebral angle tenderness, fever, and vomiting. Urinary retention and inability to void due to severe dysuria suggest Herpes simplex of the urethral meatus.

3. *How do you elicit a sexual history from Damian?*

   Adolescents will rarely volunteer information about their sexual behavior, even if they have questions relating to their sexual health. Although a general discussion of sexuality might be worthwhile, adolescents generally seem more open to a focused discussion that

addresses issues of particular concern to them. Opening the discussion makes it clear that you consider this to be an important dimension of health care.

Let Damian know that these are questions you routinely ask patients because they can relate to health (Handout/Overhead 2). This approach might lower his anxiety regarding questions about sexual behaviors, sexual orientation, and sexual abuse, and may shift the focus from the mechanics of contraception or the symptoms of medical disease to a broader discussion.

You might precede your questions with an opening comment such as: "Some adolescents have sexual practices that put their health at risk. I need to ask you questions that I also ask my other patients because I am concerned about their health." This opener can lead to the straightforward: "Have you had sex with females, males, or both females and males?" It is worthwhile to reinforce the fact that you are asking these questions because they can affect his health, not because you are judging him or assuming anything about him.

Give Damian the option not to discuss these issues with you, but let him know which ones are important if you are to treat him acutely. This gives him control over the process and is less invasive. Even if Damian chooses not to discuss these issues with you, he will know that you are open to discussion and may choose to do so in the future.

A sexual history should include:

- The number of sexual partners in the past six months
- Whether partners were symptomatic (vaginal discharge, abdominal pain)
- Whether any sexual partners were diagnosed with STDs
- Whether any sexual partners were at high risk for STDs (multiple partners, exchanging drugs for sex, having sex without a condom)

You might find it useful to explore the type of relationship(s) Damian engages in by asking, "How would you describe you personal relationship(s) with your sexual partner(s)?" or "What do you know about your partner's risk factors for HIV and other sex-related problems?"

Likewise, it is useful to inquire about the use of protection. Consider asking, "What have you been doing about the possibility of infection/pregnancy from your sexual contact(s)?" and asking whether there have been any symptoms of STDs.

You should explore specific sexual behaviors (Handout/Overhead 2): "It would be helpful to know the types of sexual practices between you and your partner(s). These include vaginal, oral, and anal sex," or "Oral sex can involve the mouth and the penis or the mouth and the vagina. Have you done either of those forms of oral sex?"

For homosexual males, the question might be phrased, "There are two types of anal intercourse, receptive and insertive. Have you practiced one or both?" If a history of

receptive anal intercourse is elicited, one should also ask about tenesmus (pain in the rectum associated with a feeling of fecal urgency), a sign of proctitis.

Note that adolescents may maintain a distinction between sexual behavior and sexual orientation. This is true for male prostitutes, who may engage in sexual activities with other males for money, food, shelter, or clothing, but consider themselves heterosexual. Also, adolescents who eventually have a homosexual orientation may engage in heterosexual behavior during the formative years of their identity development because that is the predominant behavior of their peer group. Both the behaviors and the orientation are important with respect to health. Self-concept and self-esteem are just as important as disease prevention and treatment.

SECTION 5 ADDITIONAL QUESTIONS AND ANSWERS

You address the above issues with Damian and he tells you that he also sleeps with another girl occasionally but "it's not serious." You ask about sexual behavior with this partner and determine that he mostly "does it the other way" so that he doesn't get her pregnant. Clarifying the "other way," you learn that he has unprotected anal intercourse.

This other girl does perform oral sex on him; he does not reciprocate. This is not a behavior that he and his girlfriend engage in. Damian does not think that either of his sexual partners is symptomatic. He denies any interest in same-sex partners.

Damian began having intercourse at 15. He reports a total of eight sexual partners, none of them IV drug users, though one of his old girlfriends used crack cocaine occasionally and was a heavy marijuana user. Damian tells you he smokes marijuana and a half-pack of cigarettes daily.

You elicit no further information of interest and proceed to the physical examination.

1. *What are the important details to observe in a focused clinical examination of the adolescent male with Damian's presentation? What tests would you perform?*

   Examination of the genitalia of any patient should begin with a sexual maturity rating (SMR or Tanner staging). There are five stages of sexual maturity:

   1. testes <2.5 cm in length and no pubic hair
   2. testes 2.5 cm, penis lengthening, and a small amount of long, straight dark pubic hair
   3. testes 3 cm, penis widening and a large amount of long, straight dark pubic hair
   4. testes 4 cm and curly, dark pubic hair *not* on the medial thigh
   5. testes ³5 cm and curly, dark pubic hair extending down the medial thigh

   You should examine the penile shaft for ulcers (painful small ulcers suggesting Herpes simplex; larger painless ones suggesting syphilis) or painless growths (human papilloma virus, syphilis, or molluscum contagiosum).

   Examine the meatus, and if a discharge is evident, collect it for gram stain and wet mount, as well as tests for chlamydia and gonorrhea. Palpate the testicles for tenderness (to identify epididymitis or seminal vesiculitis). And always palpate the testes for masses, since testicular tumors, though rare, are readily detectable.

   In the case of a patient who has had receptive anal intercourse, send a rectal swab for gonorrhea and perform a rectal examination, with particular attention to prostate tenderness, and anal or rectal warts.

If the patient had no urethral discharge, a specimen of 10cc of first-voided urine should be obtained prior to swabbing the urethra. This is checked by dipstick for the presence of leukocyte esterase (which is a marker for urethritis, especially in the absence of nitrates in the specimen), by microscopy for white blood cells, or both.

HIV testing should be addressed with Damian because he has had eight sexual partners and engages in high-risk sexual behaviors. This is an opportunity to talk with Damian about his risk factors and explore ways to reduce his risks.

5. *Damian's physical examination reveals a sexual maturity rating of 5 for both pubic hair and genital structures. He has no obvious lesions on his penis or testes, no obvious discharge, and no testicular tenderness. His urinalysis reveals 3+ leukocyte esterase. How would you treat this young man?*

Damian has symptoms and laboratory findings consistent with urethritis. This could be caused by either chlamydia or gonorrhea. In this case, you should treat for both because they often coexist and may be difficult to differentiate.

Several treatment options are outlined in the CDC guidelines for the treatment of STDs. One common protocol for urethritis includes ceftriaxone 125 mg IM, and doxycycline 100 mg PO, twice daily for 7 to 10 days. Doxycycline can be replaced by a single dose of 1 g of azithromycin orally. The ceftriaxone/azithromycin regimen is more expensive, but makes it possible to complete the entire treatment regimen in the office. Thus, rather than relying on the adolescent to complete a several-day course of oral doxycycline, the practitioner can be assured of 100% compliance with treatment.

The patient should experience rapid relief of symptoms. However, reinfection is possible, so recurrence of symptoms should not necessarily be interpreted as treatment failure.

Finding one STD should prompt the investigation for others. A syphilis test is indicated, as is Hepatitis B testing. Damian should also be offered HIV testing (with appropriate pre- and post-test counseling).

Treatment of the partner is imperative to prevent reinfection. In Damian's case, both his partners should be examined, cultured, and treated for both chlamydia and gonorrhea. Many clinicians have found it useful to give patients letters for their partners to take to their physicians. This letter outlines your findings and treatment, and helps to guide the management of your patient's partner.[1]

[1]The advantage of the azithromycin/ceftriaxone is increased compliance because the entire regimen can be given in a single oral dose of medication. Many practitioners have arranged to have azithromycin in the office, so that the entire course of treatment is completed at the time of diagnosis.

Your treatment of Damian is not complete without risk-reduction counseling. It is unlikely that he will choose abstinence as a risk-reduction option. If he plans to continue to be sexually active, he needs to be aware of means of reducing his risk of acquiring or transmitting STDs. Emphasize the importance of using latex condoms and provide a brief review of techniques for appropriate condom use.

Damian should receive a more extensive review since he has clearly had problems before. Most likely, problems with condom use occur due to storage of the condoms in excessive heat (such as in a wallet or automobile glove-box), use of petroleum-based products, or placement of the condom on the penis without providing space for semen collection.

Damian should also be warned to withdraw from the vagina promptly upon ejaculation and to hold the base of the condom onto the penis as he does so, in order to avoid having the condom come off inside the vagina and spill its contents.

SECTION 6 SUGGESTED READING

1. *Sex and America's Teenagers*. The Alan Guttmacher Institute, 1994.
   Excellent summary of data related to sexual activity in teens. The Institute is a good resource for fact sheets on statistics related to sexual behavior in both teens and adults.

2. Neinstein, L. *Adolescent Health Care: A Practical Approach*. Second edition. Urban & Schwarzenberg: Baltimore, 1991.
   Superb primer on adolescent medicine that covers all of the major issues in a brief and easy to understand form. It is a valuable reference in the clinical setting. Of particular interest are the first two chapters, which outline the physiological and psychosocial development of the adolescent.

3. Emans, J.H. and Goldstein, D.P. *Pediatric and Adolescent Gynecology*. Third edition. Boston: Little, Brown, and Company, 1990.
   Useful reference text. It has an excellent chapter on the gynecologic examination and has good pictures of normal variants. It also discusses in some detail adolescent gynecologic abnormalities and STDs in females.

4. West, J.C. and Remafedi, G. When your patient is gay. *Contemporary Pediatrics* 6(8):125–138, 1989.
   For those who have little or no experience in caring for homosexual and bisexual youth, this is a very good introduction to the care of this population. It guides clinicians in the sensitive, nonjudgmental identification of these youth in the course of a routine visit.

5. Hatcher, R.A., Stewart, F., Trussel, J. et al. *Contraceptive Technology 1994-1996*, 16th edition. New York: Irvington Publishers, 1994.
   Very practical, clearly written text on the various contraceptive methods. Includes instructions for patients.

6. Centers for Disease Control and Prevention. 1993 Sexually Transmitted Diseases Treatment Guidelines. *Morbidity and Mortality Weekly Report* 42(RR-14):1–73, 1993.
   Authoritative guide to the currently recommended management of sexually transmitted diseases, updated regularly.

SECTION 7 AUDIO-VISUAL RESOURCES

1. **Health Flip Chart Series**. Four flip charts on HIV/AIDS, STDs, birth control, and reproductive anatomy and physiology. Includes leader's guides. $240 for set or $75 each.

   Contact: ETR Associates, PO Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

2. **Sex Can Wait Series.** Abstinence-based sexuality program divided into three grade levels (upper elementary, middle school, and high school). $140 for set or $59.95 each.

   Contact: ETR Associates, PO Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

3. **Postponing Sexual Involvement Program.** Video-enhanced educational program divided into two age groups (preteen and teen), with separate component for parents. $80.

   Contact: ETR Associates, PO Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

4. **STD Prevention.** Various videos, pamphlets, and educational programs are available. The "Power of Choice" series contains 12 half-hour videos addressing a variety of topics and is appropriate for office use.

   Contact: ETR Associates, PO Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

5. **Decisions About Sexuality**. A 24-lesson curriculum for schools and other structured group settings to help adolescents at high risk. $36.95

   Contact: National Resource Center for Youth Services, University of Oklahoma, 202 W. 8th St., Tulsa, OK 74119-1419, 918-585-2986.

6. **Health Edco** offers educational displays for a variety of topics (including STDs) that are appropriate for office use or can be used for group educational programs in community settings or schools.

   Contact: Health Edco, PO Box 21207, Waco, TX 76702-1207, 800-299-3366, ext. 295.

SECTION 8 HANDOUTS/OVERHEADS (ATTACHED)

Painful Urination in Adolescent Males

A) Urethritis

1) Sexually transmitted infections
- Chlamydia
- Gonorrhea
- Human papillomavirus
- Mycoplasma hominis
- Ureaplasma urealyticum
- Trichomonas vaginalis
- Escherichia coli (anal intercourse)
- Bacteroides fragilis (anal intercourse)

2) Trauma
- Foreign body
- Calculus

3) Reiter syndrome
4) Stevens-Johnson syndrome

B) Cystitis

C) Pyelonephritis

HANDOUT/OVERHEAD 1

Sexual History in Adolescents

1. Important, routine part of health care
    - "Some adolescents have sexual practices that put their health at risk. I need to ask you these questions that I also ask my other patients."

2. Gender-neutral terms
    - Example: "partner" rather than "girlfriend"

3. Sexual activities, orientation, abuse
    - "Have you had sex with females, males, or both females and males?"
    - "Are you attracted to females, males, or both females and males?"
    - "How many sexual partners have you had in the past six months?"

4. Specific sexual behaviors
    - "It would be helpful to know the types of sexual practices between you and your partner(s). These include vaginal, oral and anal sex."
    - "Oral sex can involve the mouth and the penis or the mouth and the vagina. Have you done either of those forms of oral sex."
    - For homosexual males: "There are two types of anal intercourse, receptive and insertive. Have you practiced one or both?"

5. Partner behaviors that increase the risk of STDs
    - "Has your partner had sex with anyone other than you?"
    - "Have you ever had sex with someone to get drugs?"
    - "When was the last time you had sex without using a condom?"

6. Partners symptomatic or with STD
    - "Does your partner have any symptoms of an STD?"

- "Do you know if your partner has ever had an STD?"

7. Birth control/contraceptive/other practices
    - "What have you been doing about the possibility of infection/pregnancy from your sexual contact(s)?"

HANDOUT/OVERHEAD 2

SUBTOPIC 4

CHRONIC ILLNESS IN ADOLESCENTS: DIABETES MELLITUS

Developed in association with Laurie A.P. Mitan, M.D., Division of Adolescent Medicine, Department of Pediatrics, University of Rochester School of Medicine and Dentistry, Rochester, New York. **Kim Urbach, MSN, PNP,. Jane I. Tuttle, PhD, RN.**

TIMELINE (60 minutes)

5 min	Introduction/Icebreaker
5 min	Review of learning objectives
10 min	Overview
35 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

Target group: Physicians in training (senior medical students, residents, fellows) and in practice; nurse practitioners and trainees; and physician assistants and trainees.

This module provides an overview of the developmental issues faced by adolescents with chronic illness—issues that often affect their primary care needs. Although diabetes mellitus is used to exemplify the learning objectives, the module's main issues are applicable to any chronic illness.

Upon completion of this session, participants should be able to:

1. Identify how the "tasks of adolescence" can be affected by chronic illness.

2. Identify the role of the primary care provider in monitoring the medical and psychosocial aspects of an adolescent with a chronic illness.

3. Recognize the causes of, and initiate treatment for, various compliance problems.

SECTION 2 OVERVIEW

Consider what it would be like to have a condition that is life-long and potentially life-threatening, and that would require you to take injections and measure blood glucose daily as well as closely monitor your exercise and diet. How might this affect the developmental tasks of adolescence?

Our ability to treat adolescents' chronic medical problems often exceeds our ability to cure them. Diabetes mellitus is an excellent example. This disease may be difficult to manage during adolescence because of both biological and psychosocial factors. As with all chronic illnesses, diabetes can influence and be influenced by three key tasks of adolescence (Handout/Overhead 1).

1. Undergoing the physical changes of puberty. The physical changes associated with puberty may be delayed in teenagers with a chronic illness. Patients should be reassured about this delay and informed that adequate control of the underlying illness may improve growth and development. The desire to be normal can be an incentive to comply with the treatment regimen.

In diabetes, the interactions of growth hormone and sex hormones often necessitate adjustments in the patient's insulin dose and may precipitate "brittle diabetes" during adolescence. However, difficulty controlling blood glucose levels can also be related to emotional distress and conflicts associated with other developmental tasks of adolescence.

2. Achieving autonomy. This normal developmental task, in which adolescents no longer act as dependent children, can go awry in two ways in teens with a chronic illness. For some, attempts at independent control of their disease lead to poor compliance and sickness. They may not yet be cognitively or emotionally capable of managing the disease on their own. Patients with diabetes may have more frequent admissions to the hospital for diabetic ketoacidosis (DKA) when parents no longer administer insulin, check finger-stick glucose values, or monitor diet.

For other patients with chronic illness, separation is rendered more difficult due to enmeshment with a parent who has been managing their care for many years. The parent and/or patient may be reluctant to change the family "system." However, this may be necessary to adolescent development. For example, teens with diabetes should be given increasing responsibility for their insulin dosing, diet, and exercise habits, but the results of these activities must be monitored by a health care provider. The provider should supervise glycosylated hemoglobin levels, give positive feedback about appropriate behaviors, and educate the patient about inappropriate behaviors.

3. Attaining a stable identity. A third major task of normal adolescent development is identity formation, in which the adolescent acquires answers to the questions, "Am I normal?," "Who am I?" and "Who am I in relation to others, my vocation, my education, etc.?" For many adolescents with a chronic illness, the answer to these questions is often influenced by the persistent presence of the disease: "I'm not normal because I have to take shots and can't eat the way other kids do;" "I am a diabetic;" "I won't be able to do what I would like because of my disease."

Primary health care providers should make a concerted effort to help patients explore other aspects of their identity. Discussions should include important medical facts about the patient's illness to facilitate decisions around family planning, realistic career options, and life expectancy. However, the focus should always be on helping the adolescent achieve his or her goals, regardless of the condition. A chronic disease does not need to be incorporated into an adolescent's identity or become a handicap. A good way to begin this process is to avoid using the term "diabetic" to describe a person with diabetes.

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

Mary, a 15–year–old who was diagnosed with insulin-dependent diabetes mellitus at age 10, is scheduled to see you for a routine visit in your office after school. For the first three years of treatment, her parents administered her insulin subcutaneously, twice daily, after measuring her blood glucose. She remained in good control, did not require hospitalization, and grew normally.

When she entered the 8^{th} grade at age 13, Mary requested that she be allowed to monitor blood glucose and administer insulin on her own. At that time, Mary noted that her parents were not getting along. Later that year, her parents divorced, Mary lost four pounds, ceased growing, and developed ketoacidosis requiring hospitalization on three occasions.

On the morning of Mary's scheduled visit, the school nurse calls to inform you that she has missed 21 days of school this semester. She asks if there is anything that can be done to help Mary attend school regularly. It has been 10 weeks since her last hospitalization, when her glycosylated hemoglobin (Hgb A_{1C}) was two-fold higher than normal.

During the office visit, Mary reports that her blood sugars are "between 150 and 200 most of the time" but says she forgot to bring her glucose meter that retains a log of the previous 24 blood glucose measurements in its computer memory. She also reports taking her insulin regularly. Mary denies eating any concentrated sugars or any "bad" foods such as cake, pie, or candy.

Because she now has to supervise her five–year–old brother two afternoons a week until her mother gets home from work, she is unable to play the school sports that she had previously enjoyed. She has no physical complaints, but her Hgb A_{1C} measured at this visit is still two times normal.

1. What might be some of the developmental issues facing Mary that could threaten good control of her blood glucose levels?

2. How do you interpret the rising Hgb A_{1C} levels?

3. How would you intervene in relation to Mary? Her parents? The school nurse?

SECTION 4 SUGGESTED ANSWERS

1. *What might be some of the developmental issues facing Mary that could threaten good control of her blood glucose?*

   Numerous developmental issues deserve further exploration (Handout/Overhead 2). First, it is important to determine Mary's knowledge about her condition and what might cause her blood sugars to be high. She may be cognitively limited or operating under false assumptions about her diabetes. Review Mary's understanding of how to adjust her insulin dose to changes in diet, activity, blood glucose, and symptoms. Reinforce correct information and correct any erroneous ideas in a supportive and non-judgmental way.

   Second, it is worthwhile to learn what her friends and classmates know about her condition and how they act around her because of her diabetes. Peer acceptance and conformity to the group are important issues among adolescents; being "like everyone else" is one reason that diabetic summer camps (in which adolescents spend one or two weeks together in an otherwise routine camping experience) are so valuable.

   Third, you could ask how her diabetic control may relate to conflict with her parent(s) or is a response to conflict *between* her parents (e.g., being used to reunite them).

   Fourth, the degree to which diabetes relates to Mary's developing identity (either through denial or through overidentification) could threaten good control of her blood glucose.

   Finally, problems with self-esteem and her ability to function autonomously could adversely affect blood glucose control.

2. *How do you interpret the rising Hgb A_{1C} levels?*

   Mary's rising Hgb A_{1C} levels mean that her blood glucose levels are not as well-controlled as she is reporting. Because glycosylated hemoglobin reflects the average glucose over the previous three months, it is possible to mathematically relate Hgb A_{1C} to usual blood glucose, using the formula [Hgb A_{1C} X 33] -80 = average blood glucose. In Mary's case, a Hgb A_{1C} level of 12% would suggest an average daily glucose slightly over 300 mg/dL.

   Her "forgetting" the glucose meter suggests that she may be answering your questions with socially acceptable or expected answers to avoid conflict with authority. Failing to control blood glucose level is a common manifestation of adolescents striving for autonomy and rejecting authority. Alternatively, the stress of psychosocial issues may make controlling blood glucose more difficult, despite attempts at maintaining healthy habits.

Additionally, if Mary is entering a growth spurt or beginning to menstruate, alterations in hormones can make her diabetic control more difficult. Rather than confronting her about not telling the truth, it is more important to emphasize the need for better control of her blood glucose. When she knows that she will not get "yelled at" by you for having high blood sugars, she is more likely to be honest about her behaviors related to insulin, eating, exercise, and stress. The Hgb A_{1C} level is a crucial benchmark in this regard.

3. *How would you intervene in relation to Mary, her parents and the school nurse? (See Handout/Overhead 3)*

Intervention with Mary:

- Establish a therapeutic alliance with Mary, emphasizing how managing her diabetes better can give her a greater sense of control and might make her feel better.
- Ensure that Mary has the information she needs to make autonomous decisions in managing her diabetes by having her respond to various clinical scenarios that could arise in her daily life (e.g. what to do if she gets the flu).
- Help Mary deal with conflict that she may have with her parents through means other than "acting out" through diabetes (e.g., counseling, peer group, family therapy).
- Schedule frequent, brief follow-up visits or phone calls to maintain close contact and to avoid her needing to become sick to get attention.
- Provide positive reinforcement for appropriate behavior, as indicated by falling levels of Hgb A_{1C}. Stable or rising Hgb A_{1C} levels should be addressed matter-of-factly but with concern and with an eye to changes that will cause them to fall.
- Encourage a normal lifestyle, with the only limitations being that Mary must be aware of her nutritional intake, energy output, and insulin needs. As noted above, diabetic summer camp can be a powerful normalizing experience.
- Consider changing Mary's insulin from a combination of an intermediate acting NPH and Regular insulin injections to a regimen of once a day Ultralente and Regular insulin injections with meals. This would allow more flexibility and control over eating. For example, she could eat dinner after the Friday evening basketball game rather than missing the game in order to eat at the scheduled NPH insulin dosage time.

Parent(s): By addressing their roles in helping Mary maintain her health, you can help the parents work together as father and mother, even though they are no longer husband and wife. The noncustodial parent may blame the other for Mary's situation. You may need to act as referee to keep both parents focused on what each can do to meet Mary's needs.

The importance of consistency and limit-setting (not allowing excuses for inappropriate behavior on the basis of her disease) cannot be overemphasized. Also, her parents must recognize that unresolved conflict can result in poor glucose regulation and that repeated ketoacidosis is dangerous.

It may be helpful to see the parents together, without Mary, to determine a course of action that everyone can support. In these sessions, listen to the parents' needs and empower the parents to help Mary. A few such sessions may be enough to create a consistent environment to maintain glucose control. Alternatively, parent support groups can be useful, as can solution-oriented family counseling.

School nurse: Consider having the nurse help Mary measure her blood glucose daily and observe her insulin administration, if needed, before lunch. This may be less threatening to Mary's sense of autonomy because the nurse is a health care provider.

It might also be helpful to offer an in-school session to explain diabetes to Mary's classmates and teachers in a "show and tell" format, dispelling any myths. Finally, with Mary's permission, arrange to have the school nurse call you any day that Mary does not attend school to determine if the absence is justified due to illness and whether any changes in insulin dosage need to be considered.

SECTION 5 ADDITIONAL QUESTIONS AND ANSWERS

1. *How would the availability of insulin via a continuous infusion pump, a pancreas transplant, or yet-to-be-developed gene transfer therapy change the management of Mary's insulin-dependent diabetes mellitus?*

   Innovations such as continuous infusion pumps or pancreas transplantation offer the possibility of dramatically different treatment approaches than are presently available and may be very attractive to some adolescents because they would allow patients to forget about their diabetes. However, it is important to ground the adolescent (and the family) in the reality of the present treatment of diabetes mellitus, which includes proper diet, exercise, and regular administration of insulin.

   If genetic transfer techniques are eventually developed, the need for equipment or surgery might be obviated. But the best preparation for being able to take advantage of new advances in the future is taking the best possible care of oneself on a daily basis now.

2. *If Mary continues to have episodes of ketoacidosis requiring hospitalization and there is worsening of her glucose regulation (despite establishing and attempting to carry out a reasonable therapeutic plan), what might you do to ensure her well-being?*

   It is reasonable, after setting clear guidelines and establishing unambiguous consequences for poor glucose control, to consider placement outside of the home. This option may need to be pursued if Mary's condition worsens despite everyone's attempts to help her. It would not be a punishment or directed at either parent with blame. Instead, it would be an acknowledgment that Mary is unable to remain healthy in her present environment.

   The placement may need to be with a relative or friend because choosing one parent over the other may lead to loyalty conflicts for Mary. The placement need not be permanent.

   After Mary has established and maintained better glucose control, she may be able to better cope with unresolved conflicts that frequently underlie repeated episodes of ketoacidosis. Group homes or residential treatment facilities can help "break the cycle" and establish healthy daily activities. Although these measures may be considered drastic, they may be life-saving when a patient is unresponsive to treatment.

SECTION 6 SUGGESTED READING

1. Spack NP. Diabetes Mellitus in adolescents. *Adolescent Medicine: State of the Art Reviews*. 1991;2 (3):523–538.
   Overview of adolescent development with attention to psychosocial and medical interactions in patients with diabetes. Includes sections on contraception and substance abuse.

2. The Diabetes Control and Complications Trial Research Group. The Effect of Intensive Treatment of Diabetes on the Development and Progression of Long-Term Complications in Insulin-Dependent Diabetes Mellitus. *New Engl J of Med*. 1993; 329 (14):977–986.
   Seminal article demonstrating that "tight" control of blood sugars is associated with fewer long-term complications in both adults and adolescents.

3. Coleman WL. Family-focused behavioral pediatrics: Clinical techniques for primary care. *Pediatr in Rev* 1995;16(12):448–455.
   Practical and useful suggestions for working with families in which an adolescent has a behavior problem. Techniques are applicable to a wide range of problems and ages.

4. Clawson JA. A child with chronic illness and the process of family adaptation. *J of Pediatr Nurs* 1996;11(1):52–61.
   Addresses the concept of family adaptation to a child with chronic illness in a developmental and health-oriented, rather than a fixed, pathological perspective.

SECTION 7 RESOURCES

1. **American Diabetes Association, Inc.** Offers a wide variety of educational materials in various formats.

   Contact: American Diabetes Association, Diabetes Information Service Center, 1660 Duke Street, Alexandria, VA 22314, 800-232-3472.

2. **National Diabetes Information Clearinghouse** Provides information about diabetes and its management to health care providers, educators, patients and families. Produces a newsletter, *Diabetes Dateline*, and bibliographies and literature searches.

   Contact: National Diabetes Information Clearinghouse, 1 Information Way, Box NDIC, Bethesda, MD 20892-3560, 301-654-3372.

3. **Big Changes, Big Choices**. A video series with 12 30-minute videos on common issues of adolescence that may be affected by a chronic illness, such as diabetes (e.g. enhancing self-esteem, getting along with parents, speaking of sex, etc.). $699.50 for the set or $69.95 each.

   Contact: ETR Associates, PO Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

4. **Teen Stress!** Pamphlet that discusses the causes of stress as well as healthy and unhealthy ways to deal with it.

   Contact: Channing L. Bete Co., Inc., 200 State Road, South Deerfield, MA 01373-0200, 800-628-7733.

5. **About Dying**. Pamphlet that assists thought and discussion on this difficult topic.

   Contact: Channing L. Bete Co., Inc., 200 State Road, South Deerfield, MA 01373-0200, 800-628-7733.

6. **About Self-Esteem**. Pamphlet that helps patients evaluate their level of self-esteem and lists ways to improve it.

   Contact: Channing L. Bete Co., Inc., 200 State Road, South Deerfield, MA 01373-0200, 800-628-7733.

SECTION 8 HANDOUTS/OVERHEADS (ATTACHED)

Tasks of Adolescent Development

1. Physical changes of puberty
    - May be delayed in chronic illness
    - Need to be normal
2. Autonomy
    - Need to be "in control"
    - Compliance with treatment regimens
    - Separation from family
3. Stable Identity
    - Am I normal ? (early adolescent)
    - Who am I ? (middle)
    - Who am I in relation to others? (late)
    - Sick role as handicap
4. Thinking skills

HANDOUT/OVERHEAD 1

Developmental Issues for Adolescents with Chronic Illness

- Knowledge about illness
- How to control symptoms
- Peer understanding of illness
- Power struggles and conflict
- Identity related to chronic illness
- Self-esteem
- Autonomy

HANDOUT/OVERHEAD 2

Interventions

Adolescent

- Therapeutic alliance
- Information
- Conflict resolution
- Frequent, brief contact
- Reinforcement of appropriate behavior
- Encouragement of normalcy
- Adjustment of treatment to fit lifestyle

Parent(s)

- Therapeutic partnership
- Avoidance of blame, fault, guilt
- Consistency and limit-setting
- Relationship of conflict to symptoms

Nurse

- Supervision of healthy behaviors
- Peer understanding
- Enforcement of limits

HANDOUT/OVERHEAD 3

SUBTOPIC 5

SUICIDE IN ADOLESCENTS: RURAL COMMUNITY-BASED STRATEGIES

Developed in association with Carolyn P. Dukarm, M.D., Division of Adolescent Medicine, Department of Pediatrics, University of Rochester School of Medicine, Rochester, New York. Adrienne Stith, PhD.

TIMELINE (60 minutes)

5 min	Introduction/Icebreaker
5 min	Review of learning objectives
10 min	Overview
35 min	Review of Case/Questions
5 min	Additional Questions and Answers

SECTION 1 LEARNING OBJECTIVES

Target group: Physicians in training and in practice; nurse practitioners and trainees; and physician assistants and trainees.

By the end of this session, participants will be able to:

1. Recognize the magnitude of the problem of adolescent suicide in the U.S.
2. Know the risk factors and warning signs for suicide among adolescents.
3. Discuss potential roles for the primary care provider in suicide prevention.
4. Identify several options for community-based strategies for suicide prevention.

SECTION 2 OVERVIEW

Suicide is a major public health problem among adolescents in the United States. It is the third leading cause of death among individuals 15 to 24 years old, preceded only by homicide and accidents. Between 1960 and 1990, suicide rates in that age group increased nearly threefold.

White males are at the highest risk, with a fivefold higher completed suicide rate than white females. This gender difference is even more apparent in the 20– to 24–year–old group, in which white males have a sixfold higher rate of suicide. Black and other minority males have traditionally had a suicide rate much *lower* than white males and only slightly higher than females. However, recent trends have reversed. White male adolescents stabilized their suicide rate between 1988 and 1991, while the suicide rate among black and other minority males has more than doubled. Among the minority groups at greatest risk for suicide are Native Americans.

When suicide *attempts* are considered, the male-to-female ratio is reversed. The typical profile of a suicide attempt is a young female who ingests drugs or medications at home, in school, or in the presence of her friends, where the action is likely to be recognized. In contrast, completed suicide most commonly occurs through a self-inflicted gunshot wound in a white male, often with a history of self-harmful behavior, drug abuse, school problems, and other risky behavior.

Although clinicians sometimes differentiate between a suicide "gesture" as an attention-seeking mechanism and a suicide "attempt," in which the intent is to kill oneself, such differentiation can be hazardous because the former is likely to be minimized, and minimization can increase the likelihood of escalating behavior if the underlying problems are not addressed.

Surveys indicate that at least 25% of adolescents contemplate suicide and approximately 1% act on those thoughts. Although there are 50 to 150 suicide attempts for every completed suicide, a completed suicide usually is preceded by suicidal ideation, threats, actions, or other warning signs.

Numerous factors predispose an adolescent to suicide (Handout/Overhead 1). Among the most important are:

- Perception of being unwanted, isolated, or inadequate (especially among homosexual males)
- Depression
- Risk-taking behavior (including substance abuse)
- Poor school performance and attendance
- Family or romantic conflicts
- Poor impulse control
- Recent loss of family member or close friend (especially by suicide)
- Psychiatric disorder (other than depression)
- Family history of suicide or alcoholism

- Previous suicide attempt
-

These factors are cause for concern, especially if they are perceived to escalate over time.

The National Center for Injury Prevention and Control has recently focused on youth suicide-prevention programs. Whereas the traditional training of health care professionals focuses on the assessment and treatment of the acutely suicidal individual in a clinical setting, community-based prevention programs target groups of youth in a variety of ways. Most of these methods remain untested, but many show great promise.

SECTION 3 CASE STUDY/DISCUSSION QUESTIONS

You are the only physician in a rural county in the southern United States. The surrounding community has a population of approximately 7,000 people and has depended on agriculture for several generations. However, a few years ago, a major flood ruined many of the local farms, most of which were uninsured. The resultant bankruptcy and escalating unemployment has devastated the community. Some families moved away, but others remain while social structure and support decline. An increasing number of adolescents and adults have developed alcohol and substance abuse problems. The sheriff has recently reported a rise in alcohol-related crimes.

During your 10 years in this town, you have treated many residents. You remember the vibrant, family-oriented community of the past. In the previous month, one junior high school student shot himself to death in his family's home and another student ingested pills in a suicide gesture. The school principal contacts you due to the devastating impact on the student body. Many students report feelings of shock and numbness. Faculty and students alike feel helpless, scared, and guilty, while friends and family members are feeling bereaved and betrayed. At a time when the school needs to join together for support and comfort, there is an unsettling sense of blame and anger.

The principal asks you to assist in the development of a school-based program to help prevent suicide. Her initial questions to you include concerns regarding:

- Who should be notified of a teen suicide
- When notification should occur
- How notification should occur
- Who should be involved in response to a completed or attempted suicide
- How advisable it is to develop a prevention strategy

1. How would you respond to the principal's initial questions regarding notification of a suicide to the student body? What guidelines would you recommend?

2. What are several different strategies for implementing suicide prevention programs in a high school or in a community?

3. What would be potential threats to the success of these programs?

4. What are the data regarding the effectiveness of various interventions and what guidelines would you establish prior to program implementation in the school or community?

SECTION 4 SUGGESTED ANSWERS

1. *How would you respond to the principal's initial questions regarding notification of a suicide to the student body? What guidelines would you recommend?*

   The announcement of the death of a student, whether by suicide or other means, is best made in individual classrooms by teachers or guidance counselors who knew the student. The information must be delivered quickly, accurately, and with as little trauma as possible.

   A crisis intervention team consisting of selected school personnel, health and mental health care providers, and key members of the community (local leaders, police, clergy, etc.) can assist in sharing information with parents and the media. Information must be presented in a way that maximizes confidentiality and demonstrates respect for the person involved. To prevent glorification of the event, such information should not be shared in special assembly or over the public address system at the school.

   Many communities have informal agreements between the medical examiner's office, health care providers, and the media not to release the cause of death in cases of suicide and not to publish the details of the cause of death in an obituary. In addition to the concerns of respecting the privacy of the adolescent and his or her family while providing adequate information to the student body and minimizing misrepresentations, you must also be concerned about the contagion effect of adolescent suicide. Incidents of attempted suicide are best kept confidential.

   The U.S. Centers for Disease Control and Prevention (CDC) has published recommendations to minimize contagion (Handout/Overhead 2). Avoid factors that can promote suicide contagion, including:

   - Presenting simplistic explanations for suicide
   - Providing sensational coverage of suicide
   - Reporting how-to descriptions of suicide
   - Presenting suicide as a tool for accomplishing certain ends
   - Glorifying suicide or persons who commit suicide
   - Focusing on the suicide completer's positive characteristics

   It is also important to monitor survivors who have an unusual interest in the details of the death or who seem obsessed with the event even though the student may not have been a close friend. These students may be at risk of contemplating suicide in the near future.

2. *What are several different strategies for implementing suicide prevention programs in a high school or in a community ? (See Handout/Overhead 3)*

Strategies in adolescent suicide-prevention programs focus on two general themes. First, programs may focus on the identification and referral of suicidal individuals for mental health care. Included within this strategy are:

- "School gatekeeper" training to help school staff respond appropriately to identify and refer students who are at risk of suicide
- "Community gatekeeper" training (e.g. clergy, law officers, merchants, recreation staff, and health care providers) to identify and refer young people appropriately
- General suicide education in which students learn about suicide, its warning signs, and how to seek help for themselves or others
- Screening programs in which a questionnaire format is used to identify high-risk individuals who are then assessed further and referred for treatment, as necessary
- Crisis centers and hotlines in which trained volunteers and paid staff are available for 24-hour telephone counseling; often linked to a crisis center or other mental health services

Second, programs may address known or suspected risk factors for suicide among adolescents and not focus solely on suicide. These programs provide:

- A better fit between high-risk youth and their schools (because a lack of integration into the school environment can result in social isolation and feelings of hopelessness in adolescents)
- Life skills training focused on self-esteem, decision-making, personal control, and interpersonal communication
- Structured peer support, which can be conducted intra- or extramurally, to foster peer relationships and competency in social skills among high-risk youth
- A comprehensive approach to address high-risk behaviors that often cluster together and precede suicidal activity (for example, drug involvement, school truancy, sexual activity, and conduct disorder) simultaneously

Some caveats regarding these programs:

- Educational programs about suicide are inadequate to change attitudes and behavior, and may only stimulate an interest in the topic predisposing to an increase in suicidal activity without increasing understanding or empowerment.
- Adults in the school and in the community (including parents) need to be supportive of, and involved with, the development of the program so that they consider themselves stakeholders. Such involvement should precede any classroom sessions, the dissemination of information, or other activities that might result in a need to respond.
- Linkages between suicide prevention programs and existing community mental health resources should be established before any activities are directed towards

students, to ensure that an appropriate response can be effected for youth who are identified as being at risk of suicide or in need of help.

- Problem behaviors in adolescents usually do not occur in isolation. Suicidal activity is more common in adolescents who abuse drugs, who are sexually active, who act out against authority, and who are not actively involved in school on a regular basis. Therefore, addressing suicide exclusively is of limited value, and adolescents may be better served by a more generalized approach to personal growth than to a categorical suicide prevention program.
- School may not be the ideal site for suicide prevention because youth who are disenfranchised from school appear to be at higher risk for suicide than regular attenders.
- White males age 19 to 24 have an even higher rate of suicide than those 15 to 19. This is another reason why programs outside of school may be more effective.
- The program must be tailored to the cultural and social context of the community. In this case, it would be important to emphasize restricting access to guns (keeping firearms and ammunition in separate, locked locations) because the availability of weapons in the home is generally greater in rural communities.

3. *What would be potential threats to the success of these programs?*

Lack of appropriate planning is probably the single greatest threat to the success of adolescent suicide prevention programs. Interventions put together hurriedly in response to an acute suicidal event may not allow sufficient consideration of the key participants in the process, the purpose of the intervention, the scope and content of the intervention, and how problems will be managed as they arise.

Lines of communication need to be established early, and ongoing links must be maintained between the school, health and mental health providers, law enforcement officials, student leaders, parents, and community leaders. Such planning will determine whether or not there is a wide base of support for a program, provide ideas about what kind of program is most appropriate for the community, ensure that adequate services are in place before implementation, and avoid duplication or fragmentation of services.

Lack of commitment is another threat. Without broad support, these programs fail. Failure may come in the form of increased suicidal activity, lack of interest on the part of staff implementing the program, lack of funding, or lack of evidence showing effectiveness.

Another weakness of some programs is the failure to target older adolescents who have completed high school or dropped out of school.

4. *What are the data regarding the effectiveness of various interventions and what guidelines would you establish prior to program implementation in the school or community?*

Effectiveness has not been adequately evaluated. Also, suicide rates may not be the best indicator of program success, especially if the program takes a more generalized approach to building self-esteem, improving communication or otherwise enhancing life skills. Programs focusing on violence prevention or substance abuse intervention may include elements of suicide prevention, but this outcome may not be included in evaluations.

Assuming there is wide support for a program, it is important to establish a strong sense of ownership in the community by eliciting input in the conceptualization, implementation, and evaluation of the program. Given the relative paucity of services usually available in rural communities, it is also important to integrate several modes of prevention and to develop a multifaceted, interdisciplinary approach as opposed to relying on one strategy.

It is essential to incorporate the evaluation component of the program into the initial planning. The guidelines must clearly delineate responsibilities, protocols for handling common situations, do's and don'ts, and plans for ongoing evaluation in the form of regular meetings of involved individuals as well as more formal outcomes evaluation.

SECTION 5 SUGGESTED READING

1. Adler RS, Jellinek MS. After teen suicide: Issues for pediatricians who are asked to consult to schools. *Pediatr*. 1990;86(6):982–987.
   An overview of the impact of suicide fatalities on the school environment and the pediatrician's role in aiding schools with prevention strategies and guidelines for intervention. The authors answer questions commonly posed by school staff, community officials, and family members.

2. Grossman DC. Risk and Prevention of Youth Suicide. *Pediatr Ann.* 1992;21(7): 48–454.
   Reviews the incidence of suicide attempts and fatalities, as well as risk factors and strategies for prevention.

3. Programs for the prevention of suicide among adolescents and young adults. *MMWR*. 1994;43(RR-6):3–7.
   Comprehensive review of suicide prevention programs and recommendations that stem from these programs. Discusses evaluations and recommendations for future research.

4. Low BP, Andrews SF. Adolescent suicide. *Medical Clinics of North America*. 1990;74(5):1251–1264.
   Reviews the epidemiology of attempted and completed suicide, the risk factors associated with suicide and prevention/intervention approaches.

5. Comerci GD (Ed.). *Adolescent Wellness: Depression/Suicide Monograph*. New Jersey: Health Learning Systems Inc.; 1988.
   Overview of the issues of teen suicide and depression. Designed to assist health professionals, adolescents, and parents. Case studies are included to illustrate important topics.

SECTION 6 RESOURCES

1. **About Suicide**. Pamphlet for teenagers that describes suicide warning signs and ways to help a person in need. A valuable resource for teachers, health care staff, and adolescents.

   Contact: Channing L. Bete Co., Inc., 200 State Road, South Deerfield, MA 01373-0200, 800-628-7733.

2. **Suicide Among Young People.** Pamphlet describing resources for adolescents seeking help. Written for teenagers. Important to have available in a health clinic.

   Contact: Channing L. Bete Co., Inc., 200 State Road, South Deerfield, MA 01373-0200, 800-628-7733.

3. **Depression-Help for Young People.** Valuable guide for learning about treatment options for depression and substance abuse, and their relationship with teen suicide.

   Contact: Channing L. Bete Co., Inc., 200 State Road, South Deerfield, MA 01373-0200, 800-628-7733.

4. **Young People and Stress.** Nineteen-minute videotape that describes issues in coping with stressful events and addresses the developmental concerns of teenagers.

   Contact: Channing L. Bete Co., Inc., 200 State Road, South Deerfield, MA 01373-0200, 800-628-7733.

5. **Suicide Talk!** Pamphlet for teens that suggests healthy ways to solve problems and ways to help a friend who may be contemplating suicide.

   Contact: ETR Associates, PO Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

6. **Depression and Suicide.** Thirty-minute VHS tape (part of a series titled "The Power of Choice") that offers practical suggestions for dealing with depression and suicide. $64.95

   Contact: ETR Associates, PO Box 1830, Santa Cruz, CA 95061-1830, 800-321-4407.

7. **Planning to Live: Evaluating and Treating Suicidal Teens in Community Settings**. Comprehensive resource for professionals $19.50.

   Contact: National Resource Center for Youth Services, University of Oklahoma, 202 W. 8th St., Tulsa, OK 74119-1419, 918-585-2986.

8. **Evaluation of Imminent Danger for Suicide**. Training manual for professionals working with high-risk youth. $15.

   Contact: National Resource Center for Youth Services, University of Oklahoma, 202 W. 8th St., Tulsa, OK 74119-1419, 918-585-2986.

SECTION 7 HANDOUTS/OVERHEADS (ATTACHED)

Factors Predisposing to Adolescent Suicide

- Perception of being unwanted, isolated or inadequate
- Depression
- Risk-taking behavior
- Poor school performance and attendance
- Family or romantic conflicts
- Poor impulse control
- Recent loss of family member or close friend (especially by suicide)
- Family history of depression, suicide or alcoholism
- Psychiatric disorder (other than depression)
- Previous suicide attempt

HANDOUT/OVERHEAD 1

Factors that Can Promote Suicide Contagion

- Presenting simplistic explanations for suicide
- Providing sensational coverage of suicide
- Reporting "how to" descriptions of suicide
- Presenting suicide as a "means to an end"
- Glorifying suicide or persons who commit suicide
- Focusing on the positive characteristics of suicide completers

HANDOUT/OVERHEAD 2

Strategies for Suicide Prevention

1. School gatekeeper training
    - Help school staff identify and refer students at risk of suicide

2. Community gatekeeper training
    - Help youth-serving adults in the community identify and refer young people appropriately

3. General suicide education
    - Teach students about suicide, its waming signs, and how to seek help for themselves or others

4. Screening programs
    - Detect high-risk individuals who are assessed further and referred for treatment, as necessary

5. Crisis centers and hotlines
    - trained volunteers and paid staff are available for 24-hour telephone counseling, often linked to a crisis center or other mental health services

6. Broader focus programs for high-risk youth
    - social isolation and feelings of hopelessness
    - life skills training
    - structured peer support
    - competency in social skills
    - comprehensive approach to address high-risk behaviors that often cluster together and precede suicidal activity

HANDOUT/OVERHEAD 3